

ELECTROCHEMICAL CELL INCORPORATING
SELECTIVE POLYMER WRAPPING OF RADIOACTIVE MATERIALS

ABSTRACT

A selective polymer-wrapping process is disclosed which is capable of exclusively wrapping radioactive particles from solid waste streams at room temperature. Accordingly, separation of wrapped radioactive particles from unwrapped non-radioactive particles is facilitated. The method includes exposing radioactive particles or material, alone or in combination with other materials, to a precursor monomer solution that is capable of polymerizing due to the inherent radiation of the radioactive material, whereby the radioactive material is partially or totally encapsulated in the resultant polymer.